

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	D	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,915		04/25/2005	Thomas Maier	P/63539	5419
156	7590	08/04/2006		EXAMINER	
KIRSCH	STEIN, O	TTINGER, ISRAEI	BARAN, MARY C		
	FMILLER, H AVENUI		ART UNIT	PAPER NUMBER	
NEW YORK, NY 10017				2857	,
				DATE MAILED: 08/04/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action 0	10/506,915	MAIER, THOMAS				
Office Action Summary	Examiner	Art Unit				
	Mary Kate B. Baran	2857				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>25 A</u>	pril 2005.					
	action is non-final.					
·—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>21-40</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>38-40</u> is/are allowed.						
6)⊠ Claim(s) <u>21-37</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority document						
2. Certified copies of the priority document	• •					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
,						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6)					

Application/Control Number: 10/506,915 Page 2

Art Unit: 2857

#### **DETAILED ACTION**

### Specification

1. The abstract of the disclosure is objected to because it exceeds 150 words. Correction is required. See MPEP § 608.01(b).

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

# Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A process is statutory if it requires physical acts to be performed outside the computer independent of and *following* the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure (see MPEP 2106). A claim is limited to a practical application when the method, as claimed, produces a *concrete, tangible and useful result*; i.e., the method recites a step or act of producing something that is *concrete, tangible and useful*. Referring to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in determining

whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the *final result* achieved by the claimed invention is "useful, tangible and concrete."

(<a href="http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm">chitp://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm</a>)

Claims 21-38 merely claim data manipulation and suggest that this data may then by used to adjust a device (i.e. microwave filter); however, using the manipulated data to physically adjust the device is not claimed. Furthermore, the manipulated data is not presented to a user nor does a physical transformation occur outside the computer. The claims do not produce any concrete, tangible and useful result; therefore the subject matter claimed is considered non-statutory.

# Allowable Subject Matter

- 4. Claims 38-40 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

Claim 38 is allowable over the prior art because an arrangement having a processor set up for automatic adjustment of devices having setting elements, comprising: modifying the first reference setting of the setting elements, and measuring the characteristic curve again at predefined measurement points for a configuration of the setting elements, calculating gradient functions of the characteristic curve, calculating new settings of the setting elements by minimizing an error function by using previously calculated measured values and the gradient functions and setting the

Art Unit: 2857

setting elements to the calculated values, and carrying out the adjustment again is not found, taught or suggested in the prior art of record.

Claim 39 is allowable over the prior art because a computer program product comprising a computer-readable storage medium on which a program is stored which after the program has been loaded into a memory of a computer, makes it possible for the computer to carry out a method for automatic adjustment of devices having setting elements, the adjustment comprising: modifying the first reference setting of the setting elements, and measuring the characteristic curve again at predefined measurement points for a configuration of the setting elements, calculating gradient functions of the characteristic curve, calculating new settings of the setting elements by minimizing an error function by using previously calculated measured values and the gradient functions and setting the setting elements to the calculated values, and carrying out the adjustment again is not found, taught or suggested in the prior art of record.

Claim 40 is allowable over the prior art because a computer-readable storage medium, on which a program is stored which, after the program has been loaded into a memory of a computer, makes it possible for the computer to carry out a method for automatic adjustment of devices having setting elements, the adjustment comprising: modifying the first reference setting of the setting elements, and measuring the characteristic curve again at predefined measurement points for a configuration of the setting elements, calculating gradient functions of the characteristic curve, calculating new settings of the setting elements by minimizing an error function by using previously calculated measured values and the gradient functions and setting the setting elements

Art Unit: 2857

to the calculated values, and carrying out the adjustment again is not found, taught or suggested in the prior art of record.

# Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - (a) Heisen et al. teach a tuning arrangement for a microwave device.
  - (b) Guglielmi teaches a system for synthesizing microwave filters in a rectangular waveguide.
  - (c) Finman teaches an adaptive control electromagnetic signal analyzer.
  - (d) DiBiase et al. teach a signal tracking electronically tunable filter.
  - (e) Harscher et al. teach automated computer-controlled tuning of waveguide filters using adaptive network models.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B. Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday Friday from 9:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/506,915

Art Unit: 2857

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

27 July 2006

MARC S. HUFF SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800 Page 6